

Basic Data Requirements and Their Sources

This Chapter describes the type of information (data) which must be collected before determining the site suitability for a proposed HUD-assisted project. In addition to identifying the basic data needed, this Chapter also lists sources for obtaining data. For easier reference for onsite analysis and duplication, a **Basic Data Requirements Checklist** can be found in Appendix C.

The information collected in the following steps is essential to calculating the acceptable separation distance (ASD) for a proposed project site from a potentially hazardous facility.

Step 1 – Obtain a map and/or an aerial photograph covering the proposed housing or project site and the surrounding area up to a 1 mile distance, minimum, from the site.

Step 2 – Use the map or aerial photograph and sketch or locate and list the following:

- the proposed project boundaries
- the approximate location for buildings, open or outdoor recreation space, parking lots, etc.
- the location of the hazardous commercial/industrial facilities
- the specific location of all of the storage tanks; specify if diked or undiked
- the freight yards or sidings, railroad tracks, tank and truck parking areas, barge fleeting or staging areas
- the presence of any existing barriers (hill, beams, existing buildings, etc.)

Step 3 – Identify and list the product information and physical characteristics for each storage tank or container on the site, including but not limited to the following:

- the chemical name (not the trade name) for each chemical or hazardous material
- the type and size of each one of the containers on site (list maximum gallon capacities for containers)
- if diked, the area of the diked area in square feet, surrounding the containers
- the physical state of the contents of each container e.g., hazardous gas or liquid
- whether or not the contents are stored in pressurized or unpressurized containers

Step 4 – Exclude the following as hazards for the purpose of the Regulation and the Guidebook (although excluded, you may want to make a notation of their existence on your environmental assessment to that effect):

- buried tanks or containers, and process vessels (according to sources at the NFPA, the depth at which a tank or container is buried is not a factor in need of consideration)
- natural gas holders with floating tops, used to store vaporized natural gas
- distribution piping associated with a container, storage tank or container or process vessel
- mobile tanks while moving on railroad tracks, navigable waterways, channels, and highways

Step 5 – Identify, list, and describe any existing barriers (natural or man-made), hill, etc. between the exposing hazards and proposed site boundaries. Include permanent, substantive construction, such as buildings.

Step 6 – Determine the distance between the hazard and the proposed site (buildings and unprotected outdoor areas where people might congregate) by using either a scaled map or actual on-site measurements.

Sources of Information on the Potential Hazards

Obviously, a primary source of information is the industrial facility of concern. The plant engineer or the safety director can provide data as to the types and quantities of stored contents and capacities of storage vessels for chemicals and petrochemical materials that may be present at the facility. Although aerial photographs, maps of the proposed project site and a site visit will help determine the location of containers and their proximity to the proposed site, specific information on the content and capacity of chemicals must be obtained from either the industry or local government officials. If information about content and capacity is not available from the industry, consult the local government agencies concerned with either public safety or the permitting of these types of industries. Local government agencies are generally aware of the potential hazards that the local industries may present to the public. Agencies which may have information include:

- Local Fire Marshal or Fire Department
- City Planning Agency
- State Public Utility (or Service) Commission
- State Public Safety Commission
- Department of Public Health
- City or County Engineer

The local fire department or fire prevention agencies are excellent sources of information. Most local fire departments or prevention agencies will regularly inspect facilities and/or properties which store, process or transport hazardous products. In addition, when concerns of public safety are raised, fire service personnel are usually cooperative.

For housing project sites proposed near water terminals or water channels which have industrial traffic, the cognizant State Port authority and U.S. Coast Guard Captain of the Port having jurisdiction over that channel should be contacted. Remember, however, the Regulation does not apply to waterway transport of materials.

Sources of Maps and Photographs

A primary source for maps and photos would be the project sponsor or the developer. Aerial photographs may be available from the developer of the project or local commercial survey firms (see the yellow pages of your telephone directory under Photographer-Aerial). Generally, aerial photographers maintain a file of up-to-date survey photographs taken for other clients such as State and Federal agencies so that new photographs need not be taken. Orthophotoquads, aerial photos and land use and land cover maps from USGS Mapping Center is an alternative resource for aerial photographs.

Large scale maps are available from many local public and private and Federal sources. Additional maps may be available from local Chambers of Commerce, municipal planning agencies or engineering departments and tourist information centers.

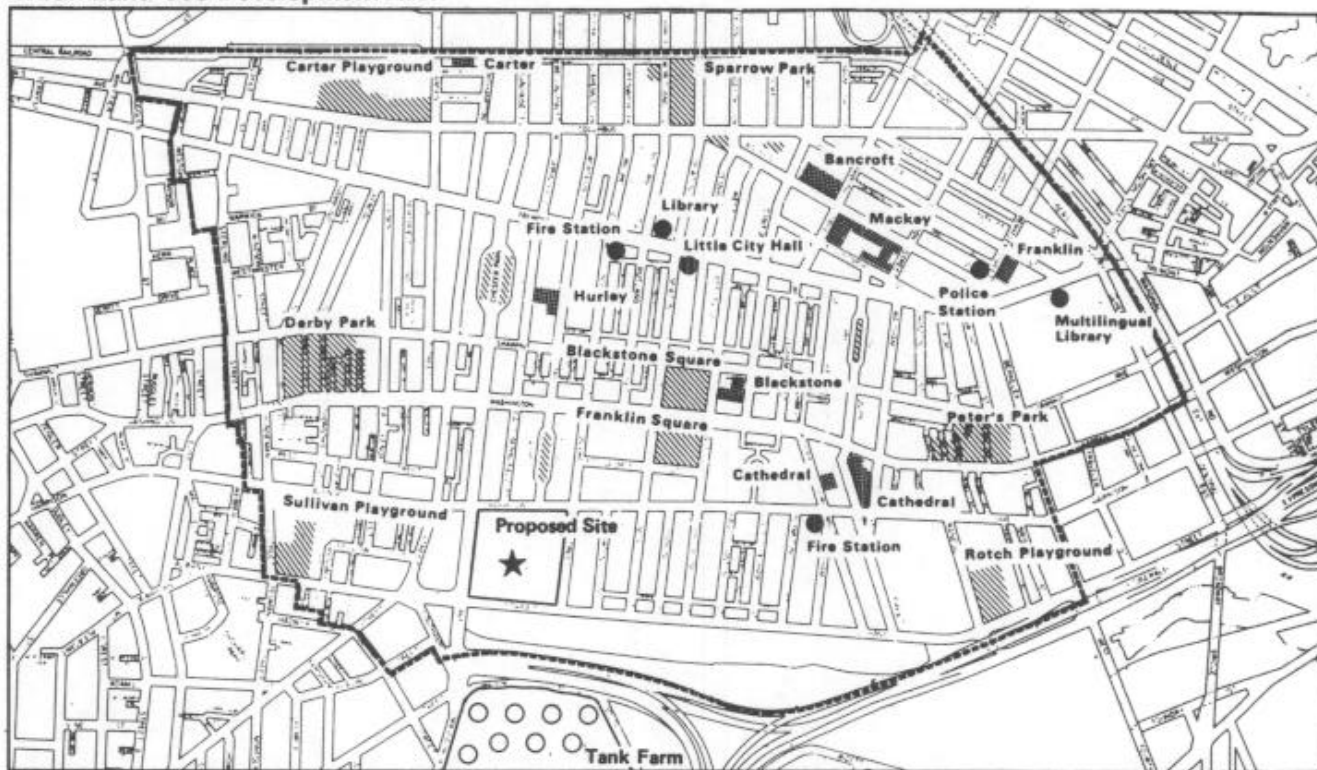
and gas stations, maps may be obtained from the following Federal sources:

- Chief, Topographic Division, U.S. Department of Interior, U.S. Geological Survey, 516 National Center, Reston, VA 22092 (Topographic Maps)
- U.S. Department of Commerce – National Oceanic and

Atmospheric Administration, Washington, DC (Maps of Coastal Areas) 20230

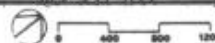
Maps and aerial photographs should be supplemented by a site visit to investigate the terrain, determine the existence of natural or man-made barriers and to measure the distance between the containers and proposed project site.

Urban Land Use Development Area



- ★ Proposed Site
- ▨ Existing Parks & Playgrounds
- Police, Fire, Library, Little City Hall

- Tank Farm
- Schools, Public & Private



Sources of Information on Chemical Characteristics

The characteristics of chemicals can be found in a number of handbooks and manuals as well as agencies and organizations.

Some organization sources include:

- National Fire Protection Association (NFPA)
Batterymarch Park
Quincy, MA 02269
- American Petroleum Institute
1220 L Street, N.W.
Washington, D.C. 20005
- Guidebook for Hazardous Materials Incidents
U.S. Department of Transportation
Research and Special Programs Administration
Washington, DC 20590

Printed references include:

- The Chemical Rubber Company, *Handbook of Chemistry and Physics*, 55th edition, CRC Press, Cleveland (1974).
- Perry, H., and Chilton, H., *Chemical Engineers' Handbook*, fifth edition, McGraw-Hill Book Co., New York (1973).
- Sax, N., *Dangerous Properties of Industrial Materials*, third edition, Reinhold Book Corporation, New York (1975).
- *Flammable and Combustible Liquids Code Handbook*, second edition, NFPA (1984).
- *Liquefied Petroleum Gases Handbook*, first edition, NFPA (1986).